## What is claimed is:

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- 1. A picture distribution system for distributing picture data from a distribution device to a plurality of receiving devices, comprising:
- a network where a plurality of logical channels are established in a time division multiplex method;
- a distribution device distributing picture data via a logical channel designated by a distribution instruction; and
- a plurality of receiving devices receiving picture data from respective logical channels designated by receiving instructions.
- 152. The picture distribution system according to claim1, wherein

said network is a ring-shaped transmission line.

- 3. The picture distribution system according to claim
- 20 1, further comprising
  - a determination unit determining a number of logical channels to be established in said network.
  - 4. The picture distribution system according to claim
- 25 1, further comprising

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an allocation unit allocating respective bands used to transmit picture data to the plurality of logical channels.

- 5. The picture distribution system according to claim1, further comprising:
  - a determination unit determining a number of logical channels to be established in said network depending on a number of picture data to be transmitted;

an allocation unit allocating respective bands used to transmit picture data to the plurality of logical channels; and

- a generation unit generating a distribution instruction based on said determination unit and allocation unit and sending the distribution instruction to said distribution device.
- 6. The picture distribution system according to claim5, wherein

priority is given in advance to the plurality of logical channels, and

said allocation unit allocates respective bands to the plurality of logical channels based on the priority given to each logical channel. The picture distribution system according to claim
wherein

priority is given in advance to the plurality of receiving devices; and

said allocation means allocates respective bands to said plurality of logical channels based on the priority given to each receiving device.

8. The picture distribution system according to claim5, wherein

said distribution device generates a receiving instruction according to a received distribution instruction and transmits the receiving instruction to a corresponding receiving device via said network.

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9. A distribution device which is used in a picture distribution system for distributing picture data from a distribution device to a plurality of receiving devices via a network where a plurality of logical channels are established by a time division multiplex method, comprising

a distribution unit distributing picture data to a plurality of receiving devices with a function to receive picture data from a logical channel designated by a receiving instruction via a logical channel designated by a distribution instruction.

10. A receiving device which is used as one of a plurality of receiving devices in a picture distribution system for distributing picture data from a distribution device to a plurality of receiving devices via a network where a plurality of logical channels are established by a time division multiplex method, comprising

a receiving unit receiving a set of picture data from a logical channel designated by a receiving instruction, the set of picture data being transmitted from a distribution device with a function to distribute picture data via a logical channel designated by a distribution instruction.

11. A picture distribution system for distributing picture data from a distribution device to a plurality of receiving devices, comprising:

a network where a fixed-length frame composed of a plurality of time slots are transmitted;

one or more distribution devices storing first picture data in a first time slot of the fixed-length frame, storing second picture data in a second time slot of the fixed-length frame, and transmitting the

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fixed-length frame to the network; and

a plurality of receiving devices receiving the respective picture data from the first or second time slots of the fixed-length frame according to a receiving instruction.

- 12. The picture distribution system according to claim 11, wherein
- if third picture data are requested to be distributed while the first and second picture data are being distributed, said one or more distribution devices store the first picture data in the first time slot of the fixed-length frame, store the second and third picture data in the second time slot of the fixed-length frame, and transmit the fixed length frame to said network.
  - 13. A picture distribution method for distributing picture data from a distribution device to a plurality of receiving devices, comprising:

establishing a plurality of logical channels by a time division multiplex method;

distributing picture data via a logical channel designated by a distribution instruction; and

25 a plurality of receiving devices receiving

respective picture data from logical channels designated by corresponding receiving instructions.

14. The picture distribution method according to claim13, further comprising:

determining a number of logical channels to be established according to a number of picture data to be transmitted;

allocating respective bands used to transmit picture data to a plurality of logical channels to be established; and

generating the distribution instruction based on the determined number of logical channels and allocated bands.

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